

## A NEW CARABUS AND CYCHRUS, WITH MISCELLANEOUS NOTES ON COLEOPTERA.

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Among a large series of Coleoptera collected by Mr. C. H. T. Townsend in the northwestern part of Mexico and forwarded to me some years ago, I note an interesting new *Carabus*, which may be described as follows:—

*Carabus Townsendi*, n. sp.—Somewhat similar to *Forreri*, Bates—Ann. & Mag., N. Hist, ser. 5, IX., p. 320—from Durango, but narrower in form, the elytra having similarly close-set unimpressed series of very minute punctures, but having each only two series of larger, widely-spaced, impressed foveæ, the inner of the three series of *Forreri* being wholly obsolete, the middle series only present in basal half and the outer extending only to apical fourth, the lateral margin more narrowly reflexed and with bluish reflection. Length, 21 mm.; width, 9 mm.

The single specimen in my cabinet was taken at Meadow Valley, six miles south of Colonia Garcia, Chihuahua, Mexico, in the Sierra Madre Mountains, at an elevation of 7,300 feet.

*Cychnus pustulosus*, n. sp.—Black, dull in lustre, with shining elytral tubercles; head coarsely punctato-rugose, with well-marked supra-orbital ridges, the front but feebly elevated at the middle; prothorax rather wider than long, the sides broadly rounded anteriorly, becoming oblique and nearly straight toward the base as in *Hemphilli*, the angles obtuse, the surface coarsely punctato-rugose and dull, the margins very finely reflexed; elytra oval, having each three series of large, widely-spaced, rounded and polished tubercles, increasing in size to the summit of the declivity and even more conspicuous than in *tuberculatus*, though less numerous, the intervening surfaces with single series of small tubercles, the interspaces also minutely and irregularly tuberculose or granulose, dull and lustreless. Length, 17 mm.; width, 8 mm. Washington State.

The single female before me differs from *tuberculatus*, not only in its oblique sides of the prothorax toward base, but in its smaller size, less robust form and stronger elytral tubercles. The prothorax of *Hemphilli*, *Rickseckeri* and *pustulosus* is oblique and nearly straight at the sides toward base, while in *tuberculatus* the sides are broadly sinuate posteriorly, the basal angles being right.

The European *Cryptophilus integer*, Heer., seems to be cosmopolitan in distribution, and, although unknown to me at the time of revising our

Cryptophagidæ (Journ. N. Y. Ent. Soc., VIII), I have since obtained single specimens from Vicksburg, Miss., Alexandria, La., and Del Rio, Texas.

In my revision of the American Coccinellidæ (l. c., VII) I erected a new genus—*Neomysia*—for the species of our fauna usually called *Mysia*, and, although I am now inclined to think that there is really no generic difference between our species and the European, the name *Neomysia* will, nevertheless, have to be applied to both, as *Mysia* is a preoccupied name. In the genus *Zagloba* (l. c., p. 113), the two forms described under the names *laticollis* and *orbipennis* seem to be merely varietal in nature, although the material in my cabinet is too scanty to base any final judgment upon. As stated by Mr. Fall, my *Exochomus ovoideus* (p. 107) should be regarded as a synonym of *desertorum*; the locality label on the former specimens is undoubtedly erroneous; they may have been taken in Colorado, in which region much of Dr. Levette's material was collected. *Nephaspis brunnea* seems to be the female of *Gorhami* (p. 168), and the name should therefore disappear in synonymy. It is my desire, in the near future, to revise again our species of *Scymnus*, as the table published in the paper mentioned is far from satisfactory in many respects.

*Liobaulius spectans*, Csy., described in the preceding volume of this journal, is closely allied to the Central American *Anthicus clavicornis*, Champ., differing principally in having the elytra punctate only in the transverse subbasal depression and not striato-punctate in basal third. *Impressipennis*, Laf., described from Texas, which also appears to be allied, differs in coloration and in its much more elongate elytra. No species closely allied to *Fronteralis* is alluded to by Mr. Champion in the "Biologia."

#### VANONUS, Csy.

Renewed observation upon the material in my collection seems to prove that those examples having the under surface of the hind femora densely papillose and the antennæ evenly and gradually enlarged distally, are males, while those without the femoral pad, but with a strong subapical lamelliform tooth on the under side of the hind femora—the antennæ having an abrupt pentamerous club—are females. It may be said, at least, that where the male spicule is visible at all, the femora are papillose, and, in the only case before me where the sex is evidently female, the femora are simply toothed. In my previous work (Col. Not., VI, p. 791,) I took it for granted, to some extent, that the remarkable

femoral tooth and abnormal antennal characters bespoke the male, and was therefore led to make a distinct genus for these females named *Tanilotes* (l. c., p. 798). Suppressing the genus *Tanilotes*, therefore, we may suggest the following arrangement for the rather numerous species of *Vanonus* :—

- Vestiture simple and uniform, short, rather stiff and not conspicuous. . . . 2
- Vestiture dual, consisting of larger, suberect and stiffer hairs, borne by the punctures, and very small, fine decumbent and denser hairs covering the interspaces; eyes generally very large, the body always small in size, less than 1.5 mm. in length; basal impressions of the pronotum large but shallow, always separated. . . . . 9
2. Two subbasal impressions of the pronotum confluent transversely. . . 3
- Two subbasal impressions separated. . . . . 8
3. Subbasal impression of the pronotum feeble, especially at the middle; species much larger, nearly 2.5 mm. in length, rather sparsely punctured, brown in colour, the head darker. Wisconsin.....*calvescens*, Csy.
- Subbasal impression deep and conspicuous throughout its extent; species minute, scarcely ever exceeding 1.5 mm. in length. . . . . 4
4. Prothorax as long as wide, or nearly so, the sides oblique and nearly straight anteriorly. . . . . 5
- Prothorax transverse. . . . . 6
5. Eyes moderately large, separated by scarcely more than twice their own width; occiput but slightly elevated, blackish-piceous in colour, the antennæ and legs red-brown; elytra feebly elevated internally near the scutellum. Pennsylvania (near Philadelphia)...*piceus*, L.c.
- Eyes smaller, separated by much more than twice their own width, the front flatter and the occiput more elevated when viewed laterally, slightly smaller in size, black or blackish in colour; elytra more strongly and abruptly subtuberculate inwardly near the humeri. Ontario (Severn). . . . .*tuberculifer*, Ham.
6. Eyes large, separated by much less than twice their own width; antennæ thick, gradually incrassate; prothorax small, subparallel toward base, narrowed apically, dark piceous-brown throughout. New York, (Hudson Valley) . . . . .*vigilans*, Csy.
- Eyes much smaller, separated by distinctly more than twice their own width; prothorax strongly, almost evenly rounded at the sides and but slightly more narrowed apically than basally. . . . . 7
7. Pale brown, the head piceous, moderately stout and convex; head intermediate in width between the prothorax and base of the elytra,

finely punctured; antennæ about half as long as the body, rather slender, enlarging moderately toward tip; prothorax finely but strongly, closely punctured; elytra parallel, about two-thirds longer than wide, the punctures strong and rather sparse, the surface strongly shining, each broadly but rather abruptly swollen near the scutellum. Length, 1.4 mm.; width, 0.75 mm. New York, (near the city)

*fusciceps*, n. sp.

- Darker brown, the head blackish; integuments much duller in lustre, the punctures denser, those of the elytra smaller, but more close-set; antennæ almost similar; prothorax relatively larger, strongly rounded at the sides, slightly narrower than the head; elytra rather more elongate and less subtruncate at apex, the swellings near the scutellum feebler and more diffuse. Length, 1.5 mm.; width, 0.7 mm. Wisconsin (Bayfield). Mr. Wickham.....*congener*, n. sp.
8. Eyes small, moderately prominent, the tempora behind them larger than in any other species of the genus, and from more than one-half to two-thirds as long as the eyes; front broadly convex, closely punctate in the male, sparsely in the female; male antennæ about half as long as the body, the five outer joints very faintly larger, those of the female two-fifths as long as the body, with the five outer joints more distinctly enlarged; prothorax densely punctate, wider than long, only slightly narrower than the head, narrowed anteriorly; elytra parallel, obtusely rounded at tip, finely, strongly and closely punctured, more elongate in the male and about three-fourths longer than wide; size small as in *piceus*. Wisconsin (Bayfield). Mr. Wickham. [= *Tanilotes lacustris*, Csy.].....*Wickhami*, Csy.
- Eyes larger, almost attaining the base; size much larger, about 2 mm. in length, similarly blackish in coloration and only moderately shining, strongly and closely punctured; antennæ barely two fifths as long as the body, the five-jointed club very broad and conspicuous; elytra parallel, nearly twice as long as wide, obtuse at apex; femoral tooth of the female much larger than in *Wickhami*. Pennsylvania (near Philadelphia).....*densus*, Csy.
9. Eyes separated by distinctly more than their own width; antennæ shorter, two-fifths as long as the body, gradually but strongly incrassate distally; elytral punctures coarser and less dense, the surface somewhat shining. Florida (Crescent City).....*Floridanus*, Csy.
- Eyes separated by not more than their own width and sometimes less; elytral punctures smaller, dense, the surface very dull; antennæ much longer, fully one-half as long as the body..... 10
10. Basal thoracic impressions distinct; form stouter, nearly as in *piceus*; antennæ thick, rather more than half as long as the body, only just

visibly incrassate throughout their length, pale; body piceous-black, the legs slender, dark brown throughout. Michigan...*Huronicus*, Csy. Basal thoracic impressions very feeble; body smaller and slender; antennæ thinner but more obviously incrassate from base to apex, black, the antennæ and legs pale, the femora blackish. Florida (Indian River) .....*sagax*, Csy.

The types as described above are males throughout, having padded femora, except *densus*, of which the only known representative is a female. The key to the interpretation of sexual identity here assumed was fortunately given by the two specimens of *Wickhami* before me, and it is regrettable that a greater number of individuals are not known in other species, in order to verify or modify the conclusions arrived at from this pair. The sexual differences certainly appear to have developed a most unusual form, since femoral modifications of the kind noted in the assumed females of *Vanonus* almost invariably pertain to the male. The types of *congener* and *Jusciceps*, following my original hypothesis, were the females of other species of the *piceus* group, but, upon the theory that all the individuals with padded femora are males, they could be considered in no other light than distinct species.

The generic name *Schizonotus* (Col. Not., IV., 1892, p. 708) is several times preoccupied, and I would therefore substitute *Schizomicrus*. The genus *Pseudolesteva*, Csy., (l. c., V., p. 398) is also preoccupied, and I would therefore substitute for it the name *Paralesteva*.

A copy of the "Index Zoologicus," of Waterhouse and Sharp, just received, forms a very useful addition to the library, although marred by a considerable percentage of error. Referring to my own genera, for example, I find the genus "Achromata," attributed to me, should be *Achromota* and, in a similar way, the genus "Megafaronus" should be *Megarafonus*. "Olia" should be *Olla*, "Pontalomata" should be *Pontomalota* and "Ulloporus" should be *Uloporus*. The genus "Eomedon," similarly assigned, was not described by me. *Eulitrus*, "Casey," should be *Eulitrus*, Sharp. I do not recollect having founded any such genera as "Sponidium" and "Typitium," which are attributed to me, and further verification is necessary. The genus *Tyloderma*, Say, seems to have been overlooked in all the lists that I have been able to consult; it is an important genus of Curculionidæ. The names *Delius*, *Isoglossa*, *Orus* and *Phalacroptis*, proposed by me, have been repeated by other authors, and, as these genera appear to be valid, the latter names will have to be changed. The name *Ditaphrus*, Csy., repeated later by Sharp, is, however, a synonym, and Sharp's name will therefore remain valid, unless it be considered better to have no two names alike, even though one of them may be a synonym, which in the writer's opinion is the preferable policy regarding genera, although unnecessary in the case of species.